

A35422 (073513.0102)  
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**CLAIM AMENDMENTS:**

Please amend the claims as follows:

1. (Previously presented) A composition for culturing epidermal melanocytes comprising basal medium, serum, one or more antibiotics, one or more growth factors, and one or more natural, physiological cAMP-elevating agents, wherein the one or more natural, physiological cAMP-elevating agents comprises epinephrine, and wherein the one or more growth factors comprises hepatocyte growth factor.
2. (Previously presented) The composition of claim 1, wherein the serum is selected from the group consisting of bovine serum, newborn bovine serum and fetal bovine serum.
3. (Original) The composition of claim 2, wherein the serum is fetal bovine serum.
4. (Original) The composition of claim 1, wherein the basal medium is selected from the group consisting of Ham's F12, RPMI and DMEM.
5. (Original) The composition of claim 4, wherein the basal medium is Ham's F12.
6. (Previously presented) The composition of claim 1, wherein the one or more growth factors further comprises a growth factor selected from the group consisting of basic fibroblast growth factor, epidermal growth factor, transforming growth factor- $\beta$ , and a combination thereof.

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7. (Previously presented) The composition of claim 6, wherein the one or more growth factors is a combination of hepatocyte growth factor and basic fibroblast growth factor.

8. (Previously presented) The composition of claim 1, wherein the one or more natural, physiological cAMP-elevating agents further comprises  $\alpha$ -melanocyte stimulating factor.

9. (Previously presented) The composition of claim 8, wherein the one or more natural, physiological cAMP-elevating agents is a combination of epinephrine and  $\alpha$ -melanocyte stimulating factor.

10. (Canceled).

11. (Previously presented) A method of obtaining epidermal melanocytes comprising: isolating epidermal melanocytes from a donor; and culturing the epidermal melanocytes using the composition of claim 1, wherein the cultured epidermal melanocytes exhibit proliferative growth, melanin production and migratory behavior.

12. (Original) The method of claim 11, wherein the epidermal melanocytes are isolated from a skin sample.

13. (Previously presented) The method of claim 12, wherein the skin sample is obtained from a minigraft or a blister top.

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14. (Original) The method of claim 13, wherein the skin sample is obtained from a blister top.

15. (Original) The method of claim 14, wherein the blister top is removed from a suction blister obtained by applying a vacuum to the surface of the skin.

16. (Original) The method of claim 12, wherein the skin sample is treated mechanically and/or enzymatically to dissociate epidermal melanocytes from other cells and tissues in the skin sample.

17. (Original) The method of claim 16, further comprising incubating the skin sample in geneticin wherein the incubation inhibits the growth of keratinocytes and fibroblasts.

18. (Previously presented) A method of providing a subject in need of skin pigmentation with a proliferating population of epidermal melanocytes comprising  
isolating epidermal melanocytes from said subject;  
culturing the epidermal melanocytes using the composition of claim 1; and  
applying the cultured epidermal melanocytes to the skin of said subject,  
wherein the cultured epidermal melanocytes exhibit proliferative growth, melanin production and migratory behavior.

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19. (Canceled) Epidermal melanocytes cultured in a composition comprising basal medium, serum, one or more antibiotic, one or more growth factor, and one or more natural, physiological cAMP-elevating agent, wherein the one or more natural, physiological cAMP-elevating agent comprises epinephrine, wherein the one or more growth factors comprises hepatocyte growth factor, and wherein the cultured epidermal melanocytes exhibit proliferative growth, melanin production and migratory behavior.